

The molds or forms G, bearing vamps, are transferred from the table F² by a pair of elastic arms, L, turning with a rock-shaft, L', while the tables are stationary. The motion of the rock-shaft L' is derived from the pinion L², driven by a sector, L³, moved by a cam, L⁵, on the shaft H'. The pinion L² is not rigidly secured to the rock-shaft L'; but it is connected by a clutch, L⁶, having teeth beveled in both directions. This clutch has one member fastened to the rock-shaft L', and the other member fastened to or formed on the side of the pinion L², against which it is pressed by a spring, L⁷, of sufficient tension to overcome all normal resistances in transferring the form G and "vamp" to the form C and the "quarters." When, through accidents, any undue resistance is encountered, the pinion L², bearing against the bearing L⁴, turns without turning the rock-shaft L', but, instead, causes it to move endwise, and by means of a lever, L⁸, liberates the spring H¹⁰ and releases the toggles H⁹, unclutches the driving-pinion, and stops the machine. When the vamp is applied to the quarters the guides or pins G², being supported by the springs G⁴, yield and recede so as to permit close contact of vamps and quarters, and the form G clamps them firmly together by engaging the projections G' in the springs C³ on the forms C.

In the modified form of the machine, as shown in Figs. 8, 9, and 10, instead of the circular table B an endless band, Q, formed of plates hinged together in the manner of the traveling platform of a "railway horse-car," is used to convey the forms C, and the intermittent cam-motion for progressively moving it is applied to the reels or cylinders upon which it returns.

The operation of the machine is as follows: The quarters and innerlining, having been previously sewed and turned, are placed in the forms C and successively placed in the machine with the slides C' of the forms in the slots B⁴ of the table B. The bolts B⁵, engaging in the holes C² in the form C, successively pass by the intermittent motion of the table B to the stencils J and pasting devices, where they receive a coat of paste on the parts exposed, and at the next step receive from the arms L a form, G, containing a vamp, which form G clasps by its projections G' upon the springs C³ of the form C, in which it is securely held. Upon farther rotation of the table B the bolts B⁵ are retracted, and the forms containing the parts pasted in exactly registered position are discharged by the springs B¹³ upon the table D. A counter or register may be added to record the work done by the machine, and also a second counter to record the number of times that the clutch H⁸ is liberated, so as to determine the amount of work produced by the machine.

Having described our invention and the mode of operating the same, we claim as new and useful therein and as original of our invention—

1. A machine for pasting the parts of shoe-

uppers together, embracing the following devices in combination: a series of forms for receiving and holding the upper, a paste fountain and brush, a clamping device, and a discharging mechanism, all substantially as described, arranged to operate substantially in the manner set forth.

2. In a machine for pasting the parts of shoe-uppers together, the combination of gages and forms, substantially as described, for guiding the feeding of parts and determining the registration thereof, substantially as and for the purpose set forth.

3. In a machine for pasting shoes, the combination, substantially as described, of pasting-brushes with guards or stencils for restricting the spreading of paste or other cement, substantially as and for the purpose set forth.

4. In a machine for pasting together the parts of shoe-uppers, the perforated forms, in combination with clamps for holding the parts in position while drying.

5. In a machine for pasting together the parts of shoe-uppers, the combination of the scraping device with a pasting device, substantially as and for the purpose set forth.

6. In a machine for uniting the parts of shoe-uppers by pasting, the combination of a wheel for receiving and conveying the forms bearing uppers with the pasting and clamping devices, substantially as and for the purpose set forth.

7. In a machine for pasting the parts of shoe-uppers together, the combination of a throw-off or disengaging device driven with the driving-shaft and the feeding and clamping mechanisms, substantially as and for the purpose set forth.

8. In a machine for pasting shoe-uppers together, the combination of a tempering or stirring device, substantially as shown, with the paste-fountains, substantially as and for the purpose set forth.

9. In a machine for pasting the parts of shoe-uppers together, the combination of forms and clamps with the guiding and discharging mechanism, substantially as shown and described.

10. In a machine for pasting the parts of shoe-uppers together, the combination of guides and clamps, substantially as shown and described, for holding the vamps during the pasting operation.

11. In a machine for pasting the parts of shoe-uppers together, the combination of an intermittently-moving table, adapted to receive the forms bearing the quarter-pieces, with a reciprocating flier adapted to convey and apply molds or clamps containing the vamps, all substantially as and for the purpose set forth.

12. In a machine for pasting together the parts of shoe-uppers, the combination of the intermittently-rotating mold or table adapted to receive vamps in clamps or molds and deliver them to a flier, substantially as and for the purpose set forth.

13. In a machine for pasting the parts of shoe-uppers together, the combination of the flier for applying the vamps with the stop-motion